


IN THE SPECIFICATION

Please amend the specification, as follows:

At page 4, between lines 25 and 26, please insert the following paragraphs:

The present invention relates to an internal member for a plasma treating vessel comprising a substrate and a Y_2O_3 sprayed coating covered on a surface thereof,.

The present invention also relates to an internal member for a plasma treating vessel comprising a substrate, a metal coating formed on a surface thereof as an undercoat, and a Y_2O_3 sprayed coating formed on the undercoat as a top coat.

 The present invention also relates to an internal member for a plasma treating vessel comprising a substrate, a metal coating formed on a surface thereof as an undercoat, a middle layer formed on the undercoat and a Y_2O_3 sprayed coating formed on the middle layer as a top coat.


The present invention also relates to a method of producing an internal member for a plasma treating vessel, which comprises covering Y_2O_3 on a surface of a substrate through a spraying process to form a Y_2O_3 sprayed coating, the Y_2O_3 in the sprayed coating having a purity of not less than 95%.

The present invention also relates to a method of producing an internal member for a plasma treating vessel, which comprises applying at least one surface treating process selected from CVD process, PVD process and thermal spraying process to a surface of a substrate to form a composite layer composed of a layer of a metal of Ni, W, Mo or Ti or an alloy thereof as an undercoat and Y_2O_3 as a top coat.

The present invention also relates to a method of producing an internal member for a plasma treating vessel, which comprises applying at least one surface treating process selected from CVD

process, PVD process and thermal spraying process to a surface of a substrate to form a composite layer composed of a layer of a metal of Ni, W, Mo or Ti or an alloy thereof as an undercoat, Al_2O_3 or a mixture of Al_2O_3 and Y_2O_3 as a middle layer and Y_2O_3 as a top coat.

The Y_2O_3 sprayed coating can be a coating having a porosity of 0.5-10% and a thickness of 50-2000 μm .

 The metal coating as the undercoat can be a coating of one or more metals or alloys selected from Ni and an alloy thereof, W and an alloy thereof, Mo and an alloy thereof and Ti and an alloy thereof and having a thickness of 50-500 μm .

The middle layer can be a layer of Al_2O_3 or a mixture of Al_2O_3 and Y_2O_3 .

The middle layer can be formed by a layer having a gradient concentration such that a concentration of Al_2O_3 is high at a side of the undercoat and a concentration of Y_2O_3 is high at a side of the top coat.

A film having a strong resistance to halogen gas corrosion can be provided as an undercoat between the substrate and the Y_2O_3 film.

An Al_2O_3 film can be provided between the substrate and the Y_2O_3 film.

The Y_2O_3 can have a purity of not less than 95% or not less than 98%.

The Y_2O_3 sprayed coating can consist essentially of Y_2O_3 .

The Y_2O_3 sprayed coating can consist of Y_2O_3 .
